

On the Influence of Moisture upon the Direction of Roots.

By P. DUCHARTRE.

The author, after referring to the experiments of Johnson and Knight, in which seeds placed beneath a mass of moist earth, or under a damp sponge hung up in the air, directed their radicle either horizontally, so as to be applied against the moist body, or even vertically from below upwards, and indicating that the experiments of Duhamel, Dutrochet, &c., the results of which were unfavourable to the idea that moisture has any influence upon the direction of roots, were made in such a way that they do not authorize any conclusion to be drawn from them, proceeds to describe some observations of his own on this subject. These observations were made upon two plants of a *Hortensia* and a shrubby *Veronica* (*V. Lindleyana*), the pots containing which had been placed in a hermetically closed apparatus. Under the influence of a confined atmosphere, saturated with humidity, these plants first of all developed, upon the lower part of their stems, roots several centimeters in length, which extended themselves in the moist air, some horizontally, others in a more or less ascending direction. Numerous roots issued from the moderately moist earth in the pots of the two last-mentioned plants, and rose into the moist air, sometimes obliquely, sometimes directly upwards.—*Comptes Rendus*, 5 January 1857, p. 10.

On the Migration of the Starling. By JAMES HARLEY, Esq., of Leicester.

To the Editors of the Annals of Natural History.

GENTLEMEN,—I am more than half inclined to believe that the observations made by Col. George Montagu on the migratory habits of that pretty bird, the Starling, are correct, although none of our own more recent out-door naturalists have ventured, in their writings, when engaged on its monograph, to advert to that part of its history. Col. Montagu is the only writer, at least with whose descriptions of its habits I am acquainted, that has made mention of the annual migration of this species.

Towards the close of the summer of last year, the writer, accompanied by a near relative, crossed from Folkestone to Boulogne, quitting Folkestone at 4 P.M. The evening was serene, with a smooth sea, and an unruffled Channel. On our losing sight of the English coast, and reaching the midway of the Straits, while engaged in our remarks on the peculiarities of the different passengers who were strolling about the deck of the vessel, a large flock of Starlings crossed our pathway overhead; we observed them at an altitude of thirty or forty yards. The flock appeared to us to consist of many hundred birds, each little creature pursuing its course in a direct line towards the Kentish coast.

After a lapse of several seconds, another flock appeared in view, fled past us, and, in a hurried manner, and by the same aerial route, made the same course towards the land of the free.

Before night-fall, and as we drew near to the coast of France, a

third and more numerous body of Starlings passed the boat with great dispatch, taking the same path as their congeners had done, which we had the good fortune to recognize so clearly in the early part of the evening.

The incident in the history of the Starling to which reference is made, pretty clearly evinces, at least to my mind, that this species of *Sturnus* is migratory in the autumnal months, performing, as it certainly does, a change of situation at that season of the year, in congregated masses and numerous bands, like some other birds belonging to the fauna of these islands. On this matter most of our own monographers have maintained a marked silence, as if ignorant in that respect, as I have said, of the peculiar wandering habit and manners of Larry Sterne's captive bird.

In this part of the kingdom the Starling abounds, especially in our retired woodlands, whole broods being reared in such places annually; the nest of the creature being placed in holes of decayed timber-trees of our thickly wooded parks, likewise within the holes and crevices of ancient buildings, church towers, and ruins, where protection and safety are afforded it during the period of nidification.

For many years past I have not failed to notice its manners throughout the whole autumn and winter season, and in so doing, have ever been led to mark the invariable increase made by the bird in its numerical diffusion at that period.

It has been with me a settled point, for many years past, that a very considerable migration of the species takes place annually; but hitherto such speculation was mere conjecture on my part. I had no proof whatever, by me, of its actual performance. However, in my passage across the Straits in the month of September last, the fact which I have briefly narrated in my letter, fails not to establish unequivocally the migration of the Starling, but proves, moreover, the adoption of its brumal retreat on these shores.

BRITISH AMPHIPODA.

To the Editors of the Annals of Natural History.

Plymouth, Feb. 16, 1857.

GENTLEMEN,—Having had an opportunity, since the publication of the Synopsis of the British Amphipoda, of comparing the necessary works at the British Museum, I am enabled to make the following corrections and addenda:—

After *O. littorea* read (Leach).

After *O. Deshayesii* read (Savigny).

Acanthonotus Owenii (mihi) is *A. testudo* of (Montagu).

Thersites (mihi) must yield to *Bathyporea* (Lindström), and probably the species *B. Guilliansonia* is the *pilosa* of that naturalist.

Leucothoë procera (mihi) is probably *furina* of Savigny; and also the genus *Dyopedos* (mihi) is *Dulichia* of Kröyer; consequently the family *Dyopedidæ* will for the future be changed to *Dulichiadæ*.

I am, Gentlemen, yours obediently,

C. SPENCE BATE.